

ABSTRACT OF THE DISCLOSURE

An object of the invention is to provide a synchronous induction motor realizing a great reluctance torque by concentrating a magnetomotive force generated by a rotor provided with a permanent magnet having a two-pole structure, and having a high efficiency. The synchronous induction motor has a stator provided with a stator winding, a rotor rotating within the stator, a cage-type secondary electric conductor provided in a peripheral portion of a rotor yoke portion constituting the rotor, and a permanent magnet inserted into the rotor yoke portion and having a two-pole structure, and the magnetomotive force generated by one pole of the rotor is set to a value equal to or less than 10 % of a peak value in a predetermined range near an electrical angle 0 degree or 180 degrees.